- (c) Mine and permit identification signs.
  (1) Identification signs shall be displayed at each point of access from public roads to areas of surface operations and facilities on permit areas for underground mining activities.
- (2) Signs will show the name, business address, and telephone number of the person who conducts underground mining activities and the identification number of the current regulatory program permit authorizing underground mining activities.
- (3) Signs shall be retained and maintained until after the release of all bonds for the permit area.
- (d) Perimeter markers. Each person who conducts underground mining activities shall clearly mark the perimeter of all areas affected by surface operations or facilities before beginning mining activities.
- (e) Buffer markers. The boundaries of any buffer to be maintained between surface activities and a perennial or intermittent stream in accordance with §§ 784.28 and 817.57 of this chapter must be clearly marked to avoid disturbance by surface operations and facilities.
- (f) Topsoil markers. Where topsoil or other vegetation-supporting material is segregated and stockpiled as required under §817.22, the stockpiled material shall be clearly marked.

[44 FR 15422, Mar. 13, 1979, as amended at 48 FR 9809, Mar. 8, 1983; 48 FR 44781, Sept. 30, 1983; 73 FR 75884, Dec. 12, 2008]

#### §817.13 Casing and sealing of exposed underground openings: General requirements.

Each exploration hole, other drillhole or borehole, shaft, well, or other exposed underground opening shall be cased, lined, or otherwise managed as approved by the regulatory authority to prevent acid or other toxic drainage from entering ground and surface waters, to minimize disturbance to the prevailing hydrologic balance and to ensure the safety of people, livestock, fish and wildlife, and machinery in the permit area and adjacent area. Each exploration hole, drill hole or borehole or well that is uncovered or exposed by mining activities within the permit area shall be permanently closed, unless approved for water monitoring or

otherwise managed in a manner approved by the regulatory authority. Use of a drilled hole or monitoring well as a water well must meet the provisions of §817.41 of this part. This section does not apply to holes drilled and used for blasting, in the area affected by surface operations.

[44 FR 15422, Mar. 13, 1979, as amended at 48 FR 14822, Apr. 5, 1983; 48 FR 43992, Sept. 26, 1983]

# §817.14 Casing and sealing of underground openings: Temporary.

- (a) Each mine entry which is temporarily inactive, but has a further projected useful service under the approved permit application, shall be protected by barricades or other covering devices, fenced, and posted with signs, to prevent access into the entry and to identify the hazardous nature of the opening. These devices shall be periodically inspected and maintained in good operating condition by the person who conducts the underground mining activities.
- (b) Each exploration hole, other drill hole or borehole, shaft, well, and other exposed underground opening which has been identified in the approved permit application for use to return underground development waste, coal processing waste or water to underground workings, or to be used to monitor ground water conditions, shall be temporarily sealed until actual use.

## §817.15 Casing and sealing of underground openings: Permanent.

When no longer needed for monitoring or other use approved by the regulatory authority upon a finding of no adverse environmental or health and safety effects, or unless approved for transfer as a water well under §817.41, each shaft, drift, adit, tunnel, exploratory hole, entryway or other opening to the surface from underground shall be capped, sealed, backfilled, or otherwise properly managed, as required by the regulatory authority in accordance with §817.13 and consistent with 30 CFR 75.1711. Permanent closure measures shall be designed to prevent access to the mine workings by people, livestock, fish and wildlife, machinery and to keep acid or

### §817.22

other toxic drainage from entering ground or surface waters.

[44 FR 15422, Mar. 13, 1979, as amended at 48 FR 43992, Sept. 26, 1983; 75 FR 60275, Sept. 29, 2010]

### §817.22 Topsoil and subsoil.

- (a) *Removal.* (1)(i) All topsoil shall be removed as a separate layer from the area to be disturbed, and segregated.
- (ii) Where the topsoil is of insufficient quantity or of poor quality for sustaining vegetation, the materials approved by the regulatory authority in accordance with paragraph (b) of this section shall be removed as a separate layer from the area to be disturbed, and segregated.
- (2) If topsoil is less than 6 inches thick, the operator may remove the topsoil and the unconsolidated materials immediately below the topsoil and treat the mixture as topsoil.
- (3) The regulatory authority may choose not to require the removal of topsoil for minor disturbances which—
- (i) Occur at the site of small structures, such as power poles, signs, or fence lines; or
- (ii) Will not destroy the existing vegetation and will not cause erosion.
- (4) Timing. All materials to be removed under this section shall be removed after the vegetative cover that would interfere with its salvage is cleared from the area to be disturbed, but before any drilling, blasting, mining, or other surface disturbance takes place.
- (b) Substitutes and supplements. Selected overburden materials may be substituted for, or used as a supplement to, topsoil if the operator demonstrates to the regulatory authority that the resulting soil medium is equal to, or more suitable for sustaining vegetation than, the existing topsoil, and the resulting soil medium is the best available in the permit area to support revegetation.
- (c) Storage. (1) Materials removed under Paragraph (a) of this section shall be segregated and stockpiled when it is impractical to redistribute such materials promptly on regraded areas.
  - (2) Stockpiled materials shall—
- (i) Be selectively placed on a stable site within the permit area;

- (ii) Be protected from contaminants and unnecessary compaction that would interfere with revegetation;
- (iii) Be protected from wind and water erosion through prompt establishment and maintenance of an effective, quick growing vegetative cover or through other measures approved by the regulatory authority; and
- (iv) Not be moved until required for redistribution unless approved by the regulatory authority.
- (3) Where long-term surface disturbances will result from facilities such as support facilities and preparation plants and where stockpiling of materials removed under paragraph (a)(1) of this section would be detrimental to the quality or quantity of those materials, the regulatory authority may approve the temporary distribution of the soil materials so removed to an approved site within the permit area to enhance the current use of that site until needed for later reclamation, provided that—
- (i) Such action will not permanently diminish the capability of the topsoil of the host site; and
- (ii) The material will be retained in a condition more suitable for redistribution than if stockpiled.
- (d) Redistribution. (1) Topsoil materials and topsoil substitutes and supplements removed under paragraphs (a) and (b) of this section shall be redistributed in a manner that—
- (i) Achieves an approximately uniform, stable thickness when consistent with the approved postmining land use, contours, and surface-water drainage systems. Soil thickness may also be varied to the extent such variations help meet the specific revegetation goals identified in the permit;
- (ii) Prevents excess compaction of the materials; and
- (iii) Protects the materials from wind and water erosion before and after seeding and planting.
- (2) Before redistribution of the material removed under paragraph (a) of this section, the regraded land shall be treated if necessary to reduce potential slippage of the redistributed material and to promote root penetration. If no